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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,023	07/07/2003	Kyung-Hun Jang	249/388	6627

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EXAMINER

SHAN, APRIL YING

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,023

Applicant(s)

JANG ET AL.

Examiner

April Y. Shan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/04/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-15 have been examined.

Priority

2. Acknowledgement is made of Applicant's claim for foreign priority based on an application filed in Republic of Korea on 06 July 2002.

Specification

3. The disclosure is objected to because of the following informalities:

For example,

- a. In [0005], "can not" should be "cannot";

Check the specification and correct any informalities the Applicant is aware of. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 7-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to **claims 7-9**, the "computer readable medium," in accordance with Applicant's specification, is carrier waves on paragraph [0046] of the specification. This subject matter is not limited to that which falls within a

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statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a form of energy. Energy does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kallio et al. (U.S. Patent 7,050,789).

As per **claim 1**, Kallio et al. discloses a method of guaranteeing users' anonymity (anonymity address – e.g. col. 3, line 42) in a wireless Local Area

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Network (LAN) system (col. 1, lines 13-15 and col. 2, lines 24-26), the method comprising:

(a) creating a plurality of temporary address sets (list – e.g.col. 3, lines 55 and a bank of acceptable anonymity addresses – e.g. col. 4, lines 1-4) each of which corresponds to (col. 3, lines 41-64) a unique Media Access Control (MAC) address (This identifier could be, a MAC address – e.g. col. 2, lines 61-64) of a wireless terminal (col. 2, lines 4-5), and transmitting each temporary address set to the corresponding wireless terminal (205 in fig. 2 and col. 2, lines 24-26); and

(b) performing data packet transmissions between a wireless terminal and a wireless access node using a temporary address selected from the temporary address set corresponding to the wireless terminal as a source address or a destination address (col. 4, lines 19-24).

As **per claims 2 and 3**, Kallio et al. discloses a method as applied in claim 1. Kallio et al. further discloses wherein the wireless access node (according to fig. 1, key server 105 connects to wireless access point 105 and wireless terminal 103. Therefore, it is a wireless access node) creates the temporary address sets, each of which consists of N (where N is an integer greater than or equal to two) temporary addresses using a MAC address contained in an access or authentication request message transmitted from a corresponding wireless terminal and wherein the wireless access node encodes the temporary address sets using a predetermined encryption key for each temporary address set, and respectively transmits the encoded temporary address sets to the corresponding wireless terminals (col. 3, lines 41-67 and col. 4, lines 1-24).

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As per **claim 4**, Kallio et al. discloses a method as applied in claims 3. Kallio et al. further discloses wherein each encryption key is created upon authentication of the corresponding wireless terminal (col. 5, lines 34-45, lines 56-67 and col. 6, lines 1-4).

As per **claim 5**, Kallio et al. discloses a method as applied in claims 1. Kallio et al. further discloses a first addressing, which is performed in the wireless access node, and generates a temporary address as a destination address randomly selected from the temporary address set corresponding to a wireless terminal that is requesting authentication (col. 3, lines 40-67, col. 4, lines 1-24 and col. 4, lines 35-38).

As per **claim 6**, Kallio et al. discloses a method as applied in claims 5. Kallio et al. further discloses a second addressing, which is performed in the wireless terminal, and generates a temporary address as a source address randomly selected from the temporary address set corresponding to the wireless terminal (col. 4, lines 56-67 and col. 5, lines 1-10).

As per **claim 7**, Kallio et al. discloses the claimed method of steps as applied above in claim 1. Therefore, Kallio et al. discloses a computer readable medium having embodied thereon the claimed computer program for carrying out the method of steps.

As per **claim 8**, Kallio et al. discloses the claimed method of steps as applied above in claim 3. Therefore, Kallio et al. discloses a computer readable medium having embodied thereon the claimed computer program for carrying out the method of steps.

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As per **claim 9**, Kallio et al. discloses the claimed method of steps as applied above in claim 6. Therefore, Kallio et al. discloses a computer readable medium having embodied thereon the claimed computer program for carrying out the method of steps.

As per **claim 10**, Kallio et al. discloses a wireless Local Area Network (LAN) system of guaranteeing users' anonymity comprising:

a wireless access node (according to fig. 1, key server 105 connects to wireless access point 105 and wireless terminal 103. Therefore, it is a wireless access node), which creates a plurality of temporary address sets, each of which corresponds to a unique Media Access Control (MAC) address of a wireless terminal, and uses a temporary address selected from each temporary address set as a destination address (col. 3, lines 40-67, col. 4, lines 1-24 and col. 4, lines 35-38); and

at least one wireless terminal (terminal 103 in fig. 1 could be a wireless terminal – e.g. col. 2, lines 24-25), which receives a temporary address set corresponding to a unique MAC address thereof from among the plurality of temporary address sets created in the wireless access node, and uses a temporary address selected from the received temporary address set as a source address (col. 4, lines 56-67 and col. 5, lines 1-10)

As per **claims 11 and 12**, Kallio et al. discloses a system as applied in claims 10. Kallio et al. further discloses wherein the wireless access node creates the temporary address sets, each of which consists of N (where N is an integer greater than or equal to two) temporary addresses, using for each

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address set the MAC address contained in an access or authentication request message transmitted from the corresponding wireless terminal and wherein the wireless access node encodes the temporary address sets using a predetermined encryption key for each address set, and respectively transmits the encoded temporary address sets to the corresponding wireless terminals (col. 3, lines 41-67 and col. 4, lines 1-24).

As per **claim 13**, Kallio et al. discloses a system as applied in claims 12. Kallio et al. further discloses wherein each encryption key is created upon authentication of the corresponding wireless terminal (col. 5, lines 34-45, lines 56-67 and col. 6, lines 1-4).

As per **claim 14**, Kallio et al. discloses a system as applied in claims 10. Kallio et al. further discloses wherein the wireless access node comprises:
a first memory, which stores the plurality of temporary address sets, each of which consists of N (where N is an integer greater than or equal to two) random addresses and is created corresponding to a unique MAC address (claim 26 and col. 6, lines 10-63);

a first MAC address filter, which filters a unique MAC address from a source address of a data packet received from a corresponding wireless terminal by referring to the temporary address sets stored in the first memory (claim 26 and col. 6, lines 10-63);

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a destination address generation unit, which enables a temporary address set corresponding to the unique MAC address of the wireless terminal requesting authentication from among the temporary address sets stored in the first memory, generates a first random selection signal, generates a temporary address randomly selected from the enabled temporary address set, and uses the temporary address as a destination address (claim 26 and col. 6, lines 10-63); and

a first random selection unit which randomly selects a temporary address from the temporary address set enabled in the first memory according to the first random selection signal generated in the destination address generation unit, and outputs the selected temporary address to the destination address generation unit (claim 26 and col. 6, lines 10-63).

As per **claim 15**, Kallio et al. discloses a system as applied in claims 10. Kallio et al. further discloses wherein the wireless terminal comprises:

a second memory which receives a temporary address set from the wireless access node and stores the temporary address set corresponding to a unique MAC address of the wireless terminal (col. 6, lines 10-63 and claim 51);

a second MAC address filter which determines whether a destination address of a data packet received from the wireless access node is included in the temporary address set by referring to the temporary address set stored in the second memory, and generates a receipt enable signal according to a determination result (col. 6, lines 10-63 and claim 51);

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a source address generation unit, which generates a second random selection signal according to a source address request signal, generates a temporary address randomly selected from the temporary address set stored in the second memory, and uses the temporary address as a source address (claim 51); and

a second random selection unit which randomly selects a temporary address from the temporary address set stored in the second memory according to the second random selection signal generated in the source address generation unit, and outputs the selected temporary address to the source address generation unit (col. 6, lines 10-63 and claim 51).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Cromer et al. (U.S. Patent No. 6,832,262) discloses a method and system for substituting an anonymous media access controller address for computer system utilizing a network.
- Munger et al. (U.S. Patent No. 7,010,604) discloses a plurality of computer nodes communicates using seemingly random IP source and destination address.

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Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



27 September 2006
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